



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,786	04/01/2004	Raymond B. Brosseuk	511-57	4969
23117	7590	11/10/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			WRIGHT, ANDREW D	
			ART UNIT	PAPER NUMBER

3617

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,786

Applicant(s)

BROSSEUK, RAYMOND B.

Examiner

Andrew Wright

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-21 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-21 in the reply filed on 8/29/05 is acknowledged.
2. Claim 22 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/29/05.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 5/11/04 was filed in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

5. The disclosure is objected to because of the following informalities: the specification, on page 9, refers to reference numeral 90 in figure 5, but there is no "90" shown in figure 5. Appropriate correction is required.

Claim Objections

6. Claim 2 is objected to. The recitation "the securing mechanism" lacks antecedent basis in the claims. It is unclear if it refers to the "steering mechanism" or to

Art Unit: 3617

the "securing means". It will be assumed that it refers to the steering mechanism.

Appropriate correction is required.

7. Claim 5 is objected to. The recitation "the plate member" lacks antecedent basis in the claims. It will be assumed that claim 5 depends from claim 4, not from claim 1.

Appropriate correction is required.

8. Claim 16 is objected to. The recitation "the actuation means" should be "the actuating means". Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 21 recites the exact opposite functions of claim 1. Claim 21 depends from claim 1, and it is impossible to achieve the functions of both claims. If it is possible, then the disclosure does not sufficiently describe how this is done.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3617

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1, 6, 7, 9, 15, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Servais (US 6,491,554). Regarding claim 1, Servais shows a rudder (38). The rudder can be aligned with the centerline of the hull, and this is a non-steering position because no steering force is being generated. The rudder can be disposed at a non-zero angle relative to the hull centerline by moving pad (30). This is a steering position. Thus the rudder can be moved between a steering and a non-steering position. The rudder is coupled at least indirectly to the steering column (68) of the watercraft when in the steering position. Shaft (86) is a securing means. Cylinder (88) and piston (96) are a biasing means for biasing the rudder to the non-steering position. RPM detector (80), controller (72), pump (82), and valve (84) are the actuating means. The controller only turns on the pump (82) when the RPM's are below a predetermined threshold.
13. Claim 6, the piston and cylinder and crossbar arrangement constitutes a piston and lug arrangement.
14. Claim 7, the lug is coupled at least indirectly to the actuating means.
15. Claim 9, the actuating means comprises an RPM sensor.
16. Claim 15, the RPM sensor will continuously send signals to the controller, thereby creating a feedback control device.
17. Claim 16, the actuating means utilizes a pressurized fluid in reservoir (78), pump (82), and cylinder (88).
18. Claim 17, the fluid is pressurized in the cylinder (88).

Art Unit: 3617

19. Claims 19 and 20, Servais describes a hydraulic piston and cylinder arrangement. Servais further discloses that a pneumatic cylinder can be used in place of the hydraulic cylinder.

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Nedderman, Jr. et al. (US 6,336,834). Nedderman shows a steering mechanism comprising a rudder (24). The rudder is moveable between non-steering position (10c) and steering position (10a). The rudder is at least indirectly connected to the steering column of the watercraft by virtue of it being connected to the waterjet nozzle. Securing means, which may be a bolt, attaches the rudder to the nozzle at point (16). Rudder can be held in the inoperative position by solenoid (30). The biasing means is the bore (32) and the portion of the solenoid that engages the bore. The actuating means is the inherent operative connection between the throttle and the remainder of the solenoid. When the throttle is released, which is an indication of watercraft speed dropping below a predetermined level, the solenoid releases the rudder from the non-steering position to the steering position.

22. Claim 2, the rudder is affixed to the nozzle.

Art Unit: 3617

23. Claim 4, the rudder comprises a plate member (22) that is substantially ventral (as defined by applicant in the specification on page 9).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nedderman, Jr. et al. (US 6,336,834). Nedderman contains the elements of claim 1.

Nedderman discloses that a bolt can be used to attach the rudder to the nozzle.

Nedderman does not disclose a nut and bolt. It is well known and common to use a nut in conjunction with a bolt as a fastener. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Nedderman by using a nut in conjunction with the bolt already disclosed by Nedderman. The motivation would be to affix the rudder to the nozzle.

26. Claims 1 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Servais (US 6,491,554) in view of Newman (US 5,741,166). Servais contains the elements of claims 1, 16, and 17. Servais discloses that the actuating means comprises a hydraulic system including a fluid reservoir, pump, and two-way valve which control the hydraulic cylinder. Servais does not disclose a solenoid. Newman shows a hydraulic system for watercraft. Newman shows that a two-way valve typically comprises a solenoid for actuation. Therefore it would have been obvious to one having

Art Unit: 3617

ordinary skill in the art at the time the invention was made to modify Servais by using a two way solenoid valve in the hydraulic system. The motivation would be to provide an actual actuation means to move the two-way valve between positions.

27. Claims 1, 8, and 10 –14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Servais (US 6,491,554) in view of Tasaki et al. (US 5,244,425).

Servais discloses the elements of claim 1. Servais discloses an engine RPM sensor, which is a known way of indicating watercraft speed. Tasaki teaches that watercraft speed may be determined in any number of equivalent ways, including: dynamic water pressure, impeller shaft rotational speed, and engine rotational speed. Other known ways of determining watercraft speed include dynamic air pressure and GPS-based algorithms. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Servais by using any other known equivalent way of determining watercraft speed, including a pitot tube at any location or a venturi. The motivation would be to optimize design parameters such as size, component layout, cost, and weight by using known equivalent watercraft speed sensors.

Allowable Subject Matter

28. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (claims 1 and 4, since claim 5 is assumed to depend from claim 4 as described above).

Art Unit: 3617

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Simner ('654) shows a rudder and control system for a jet-propelled watercraft.

30. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number 571-272-6690. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at 571-272-6684. **The Central FAX Number for official communications is 571-273-8300.** The fax number directly to the examiner for unofficial communications is 571-273-6690.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright
Patent Examiner
Art Unit 3617

ANDREW D. WRIGHT
PRIMARY EXAMINER

AW 11/7/05